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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,353	07/06/2007	Yoshito Katano	09792909-6735	9812

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EXAMINER	
WILSON, YOLANDA L	
ART UNIT	PAPER NUMBER
2113	
MAIL DATE	DELIVERY MODE
12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,353	KATANO ET AL.	
	Examiner	Art Unit	
	Yolanda L. Wilson	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,8 are rejected under 35 U.S.C. 102(b) as being anticipated by Harding et al. (US Publication Number 20030005277A1). As per claims 1 and 8, Harding et al. discloses a semiconductor device configured to start-up by reading out a boot program from a data-rewritable nonvolatile memory, boot program instructions being stored in parallel in a plurality of blocks of the nonvolatile memory, the semiconductor device comprising: a CPU configured, in part, to specify a read position for reading out the boot program instructions stored in the nonvolatile memory at the starting time, and execute a start-up process according to the thus read-out boot program instructions; and a read control circuit configured to (a) determine whether a block corresponding to the read position is faulty or not according to data read out from the block, (b) output the data to the CPU if the block is determined as not faulty, and (c) read the data from another block storing the boot program instructions and determine whether the another block is faulty or not if the block is determined as faulty in paragraphs 0011,0014,0018. The read control circuit is the control logic.

3. As per claim 2, Harding et al. discloses wherein the read control circuit is configured to determine whether the block is faulty or not faulty at least according to an

error correction code contained in the data read out from the nonvolatile memory in paragraph 0018.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding et al. in view of Hashimoto (JP57071508). As per claim 3, Harding et al. fails to explicitly state wherein the read control circuit corrects the data and supplies it to the CPU when it determines that the data is correctable according to the error correction code but otherwise determines that the block is faulty when it determines that the data is uncorrectable data.

Hashimoto discloses this limitation in the abstract.

Accordingly, a person of ordinary skill in the art would be motivated to have the read control circuit correct the data and supplies it to the CPU when it determines that the data is correctable data according to the error correction code and determines that the block is faulty when it determines that the data is uncorrectable data. A person of ordinary skill in the art would be motivated to have the read control circuit correct the data and supplies it to the CPU when it determines that the data is correctable data according to the error correction code and determines that the block is faulty when it

determines that the data is uncorrectable data because correcting data that is correctable and indicating data that is uncorrectable is a known technique.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harding et al. in view of Dawson et al. (USPN 6311213). As per claim 4, Harding et al. fails to explicitly state wherein the read control circuit is configured to determine that the block is faulty or not faulty at least according to a block state information contained in the data read out from the nonvolatile memory.

Dawson et al. discloses this limitation in column 11, lines 23-27.

Accordingly, a person of ordinary skill in the art would be motivated to have the read control circuit be configured to determine that the block is faulty or not faulty at least according to a block state information contained in the data read out from the nonvolatile memory. A person of ordinary skill in the art would be motivated to have the read control circuit be configured to determine that the block is faulty or not faulty at least according to a block state information contained in the data read out from the nonvolatile memory because Dawson et al. discloses being able to verify metadata. Metadata is the equivalent of block state information, but metadata is used for data stored in storage volumes; therefore, one of ordinary skill in the art would be motivated to verify block state information as means to determine that the block is faulty.

7. As per claim 5, Harding et al. fails to explicitly state wherein the read control circuit determines that the block is faulty when the block state information does not show a predetermined value.

Dawson et al. discloses this limitation in column 11, lines 23-27.

Accordingly, a person of ordinary skill in the art would be motivated to the read control circuit determines that the block is faulty when the block state information does not show a predetermined value. A person of ordinary skill in the art would be motivated to have the read control circuit determines that the block is faulty when the block state information does not show a predetermined value because Dawson et al. discloses being able to verify metadata. Metadata is the equivalent of block state information, but metadata is used for data stored in storage volumes; therefore, one of ordinary skill in the art would be motivated to verify block state information as means to determine that the block is faulty.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding et al. in view of Dawson et al. (USPN 6311213) in further view of Kim (USPN 6587915B1). As per claim 6, Harding et al. and Dawson et al. fails to explicitly state wherein the block state information is stored in a leading page of each of the blocks storing boot program instructions.

Kim discloses this limitations in column 4, lines 59-64.

Accordingly, a person of ordinary skill in the art would be motivated to have wherein the block state information is stored in a leading page of each of the blocks storing the boot program. A person of ordinary skill in the art would be motivated to have wherein the block state information is stored in a leading page of each of the blocks storing the boot program because storing block state information in the leading page is a known technique for storing this information.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding et al. in view of Hashimoto (JP57071508) in further view of Aasheim et al. (USPN 7178061B2). As per claim 7, Harding et al. and Hashimoto fail to explicitly state wherein the nonvolatile memory is a NAND type flash memory.

Aasheim et al. discloses this limitation in column 9, lines 20-25.

Accordingly, a person of ordinary skill in the art would be motivated to have the nonvolatile memory is a NAND type flash memory. A person of ordinary skill in the art would be motivated to have the nonvolatile memory is a NAND type flash memory because NAND type flash memory is a known type of non-volatile memory used for storing boot programs.

Response to Arguments

10. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection. The newly added limitations to the claims required a new reference to be found. Please see the above rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda L. Wilson whose telephone number is (571) 272-3653. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yolanda L Wilson/
Primary Examiner, Art Unit 2113